INDIAN SCHOOL MUSCAT

HALF YEARLY EXAMINATION

SET B

SEPTEMBER 2019

CLASS X

Marking Scheme – SCIENCE[PHYSICS]

Q.NO.	Answers	Marks (with split up)
1.	b	1
2.	c	1
3.	c	1
4.	a	1
5.	CHE-MCQ	
6.	CHE-MCQ	
7.	CHE-MCQ	
8.	CHE-MCQ (BASED ON PRACTICAL)	
9.	BIO- MCQ	
10.	BIO- MCQ	
11.	BIO- VSA (BASED ON PRACTICAL)	
12.	BIO- VSA (BASED ON PRACTICAL)	
13.	BIO- VSA	
14.	BIO- ASSERTION/REASONING TYPE	
15.	Ray diagram with arrows marked	1
16.	Resisitivity remains the same as it depends on the material of the wire.	1
17.	b	
18.	CHE- VSA (BASED ON PRACTICAL)	
19.	CHE- VSA	
20.	CHE- ASSERTION/REASONING TYPE	
21.	$(1/f) = (1/u) + (1/v)$ Object distance, u=-16 cm Therefore, $(1/10)=-(1/16)+(1/v)$ Then, v=6.15 cm Magnification, $m=-(v/u)=-(6.15/-16)=0.38$ OR	1 ½ ½ ½ + ½

	i. reason ii. refractive index of kerosene with respect to air = 1.44 refractive index of diamond with respect to air = 2.42 refractive index of diamond with respect to kerosene n = n(diamond)/n(kerosene) = 2.42/1.44 = 1.68	1 ½ ½ 1
22.	Formation of rainbow-explanation Ray diagram	1 ½ 1 ½
23.	i. SI unit of current is Ampere Definition ii. Case-I R =V/I = 220/0.4 =550Ω Case-II I=V/R = 110/550 = 0.2A OR L= RA/ρ = 5X3.14X6.25 X10^{-8}/0.8 X 10^{-8} = 122.7m R = ρl/A Substituting = 20Ω	½ ½ 1 1 ½ 1 ½ ½ ½

24.	CHE OR	
25.	CHE	
26.	CHE OR	
27.	BIO OR	
28.	BIO	
29.	BIO	
30.	BIO	
31.	i. Ohm's law –statement Verification of ohm's law with circuit diagram ii. Ohm Definition- Ohm iii. The current will flow more easily through a thick wire as compared to the thin wire because the resistance of thick wire is less than that of thin wire. Less resistance, more the current OR i. Definition- principal focus of a concave mirror ii. Any two uses. iii. Ray diagram with arrows marked nature and size of the image	1 2 ½ ½ 1 1 1 2 1
32.	I. Myopia-definition II. 2 causes for myopia III. Ray diagrams for defective vision and its correction	1 2 2
33.	CHE OR	
34.	CHE	
35.	BIO OR	
36.	BIO	